

CLASSIFICATION RESTRICTED  
CENTRAL INTELLIGENCE AGENCY  
INFORMATION REPORT

REPORT

STAT

COUNTRY China

DATE DISTR. 21 June 1948

SUBJECT Coal Mines

NO. OF PAGES 3

PLACE ACQUIRED China

NO. OF ENCLS.  
(LISTED BELOW)

DATE OF INFORMATION 29 March 1948

SUPPLEMENT TO REPORT NO.

STAT

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT OF U. S. C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED. HOWEVER, INFORMATION CONTAINED IN BODY OF THE FORM MAY BE UTILIZED AS DEEMED NECESSARY BY THE RECEIVING AGENCY.

THIS IS UNEVALUATED INFORMATION FOR THE RESEARCH-  
USE OF TRAINED INTELLIGENCE ANALYSTS

SOURCE Chinese periodical, Kung-sheng Hsin-wen, No 74, 29 March 1948. (Translation specifically requested.)

FU-SHUN COAL MINE

The coal resources of China are abundant, and the most important mining areas are in the northeast /Manchuria/. In its wealth of reserves and in its scope of mining activities and development, the Fu-shun Mine enjoys not only a national but also an international reputation.

Fu-shun lies 46 km northeast of Shen-yang (Mukden) and is connected therewith by rail and highway. The beginnings of its development on a large scale date back 50 years to the 27th year of Kuang-hai when the prefect, Wang Ch'eng-yao, organized the Hua-Hsing-Li Company to carry on a planned mining enterprise. After the organization of the Japanese South Manchuria Railway Company, the scope of operations was greatly expanded. On the one hand the production capacity of subsidiary industries was enlarged, and on the other, the increase in the population and the efficient management of the city of Fu-shun developed it into the modern metropolis of today. The mine itself has become the largest in East Asia.

On 10 April 1946 the mine was taken over by the Ministry of Finance, and on 1 November it was placed under the management of the Fu-shun Mining Office of the Natural Resources Commission. The former chief of the office was Hsieh Shu-ying. The present chief is the former general manager of the Pei-piao Mines, Mr Wei Hua-k'un. Subordinate to the chief are a secretariat and an engineering section; there are also offices controlling general affairs, accounting, business matters, machinery, shaft mining, open-pit mining, smelting, and labor. The 1947 production was 1,410,000 tons. The highest daily output was something over 7,000 tons. The current year's production is estimated at 1,350,000 tons.

The mine field is 7 km long, east and west, and from 2 to 4 km wide. The quality of the coal is excellent and it contains many chemical raw materials. The reserves amount to 700 million tons, sufficient to operate at the highest daily production estimate of 30,000 tons for over 70 years.

- 1 -

CLASSIFICATION			RESTRICTED									
STATE	<input checked="" type="checkbox"/> NAVY	<input type="checkbox"/> NSRB	DISTRIBUTION									
ARMY	<input checked="" type="checkbox"/> AIR	<input checked="" type="checkbox"/>										

RESTRICTED

RESTRICTED

STAT

The coal veins have an average thickness of 36 meters. The thickest is 125 meters and the thinnest 15 meters, making it one of the world's richest mines.

Most mines are deep in the earth and require deep shafting to operate, but at Fu-shun the coal is near the surface and can be mined by open-pit processes. The cover-rock at most mines, while of no value, requires much labor to remove, but at Fu-shun the cover-rock is oil-bearing, shale and gasoline can be extracted from it. These abundant oil-shale deposits are not only the richest in China, but are important from the standpoint of world reserves.

The present open-pit operations cover an area 7 km long and 1½ meters wide. The deepest point already reached is 165 meters below the surface. The mine itself is a large open pit. The coal veins lie at an angle of 22 degrees. It is only necessary to scrape away the cover-rock and then proceed to remove the coal. The scientific term for this mining process is "foliation." It involves five steps: (1) drilling, (2) blasting, (3) digging, (4) transportation of coal, (5) disposal of unwanted material and transportation of shale to the oil-shale refinery. Carrying on foliation efficiently requires large-scale, closely coordinated planning and close-knit operations.

There are two points in particular to be noted in the foliation process of this mine. One is unified direction, the other is mechanization and electrification. For drilling, compressed air or "Fu-shun"-type electric drills are used. When a set of holes has been drilled, explosive powder is inserted and set off. Type "120-B" or "200-B" self-propelled power shovels are used to build roads and dig up oil shale. For transport, 1,500-hp electric locomotives are used. A veritable spider web of electric wires exists. Steam locomotives are used where wires have not been installed. One locomotive pulls eight dump cars which deliver the oil shale to the dump yard (where it is stored) or to the oil-shale refinery. These dump cars are self-dumping.

The gauge of the tracks in the pits is the same as that of the national railroads so that trains can use these rails to enter the pit. These rails are laid in a switch-back pattern and are very winding like the railways in the mountains of the southwest. The coal is dug in sections which form ledges or steps on the sides of the pit. Rails are laid on each ledge. Type "50-B" cars equipped with power shovels are used to lift the blasted coal into the dump cars to be hauled and dumped into the special dump cars used on inclines. These cars carry approximately 25 tons and furnish rapid transport up and down the slopes of the pit. In places where electric dump cars cannot be used, winches are used to haul the coal in wooden cars to the ground surface.

At present open-pit mining at Fu-shun accounts for about three-fourths of the total production of coal in this field. The balance is obtained by digging vertical or inclined shafts deep into the ground. Blasting or hand cutting are employed to get the coal out. It is transported to the dump cars by belt-conveyor systems. At the foot of the well shaft it is transferred to electric lifts for elevation to the surface, which concludes the actual mining process. The conveyor belts are of leather and are from several tens to several hundreds of feet long.

The Fu-shun Mine has always furnished various chemical raw materials in addition to coal and has thus become the center of a system of interrelated plants. The chief of these is the electric power station, which in normal times was the largest in Manchuria and produced 285,000 kw. After the surrender, nine-tenths of the equipment was plundered; the remaining equipment has a capacity of 75,000 kw. According to a report in the Fu K'uang Tien K'an of 21 January 1948, the present capacity is 32,000 kw. Six thousand kw can be supplied to Shen-yang.

- 2 -

RESTRICTED

RESTRICTED

**RESTRICTED**

STAT

The second in importance is the machine shop. It is of enormous size and completely equipped, capable of manufacturing locomotives, coal cars, hydraulic machinery, elevators, electrical machinery, etc., as well as producing ordinary and special types of steel. The light metal plants produce aluminum, manganese, manganese alloys, silicon steel, refined salt, etc.

The by-products of the liquefaction plants are oxygen and carbide.

There are other factories such as cement factories, ceramic kilns, coal-gas factory, sulphuric acid factory, explosive factory, coke factory, etc. At present, the direct and indirect effects of the war on this mining enterprise are disastrous. Besides the shortages of labor and materials, and the baffling problems of power, machine parts, metals, and food transport, the difficulties are legion. These are problems that the mine itself cannot resolve. In the midst of such troubles, the enterprise may perish unless the authorities pay particular attention to the situation. Since industries are the foundation of national reconstruction, it is devoutly hoped that the responsible authorities will give considerable attention to this matter.

- END -

- 3 -

**RESTRICTED****RESTRICTED**